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PATENT ASSIGNMENT COVER SHEET

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EPAS ID: PAT5613524

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
KRISHNENDU CHAKRABARTY	07/01/2019
RAN WANG	07/01/2019

RECEIVING PARTY DATA

Name:	DUKE UNIVERSITY
Street Address:	2812 ERWIN ROAD
Internal Address:	SUITE 306
City:	DURHAM
State/Country:	NORTH CAROLINA
Postal Code:	27705

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16442920

CORRESPONDENCE DATA

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ATTORNEY DOCKET NUMBER:	210-75-CIP
NAME OF SUBMITTER:	BENTLEY J. OLIVE
SIGNATURE:	/Bentley J. Olive/
DATE SIGNED:	07/11/2019

Total Attachments: 6

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> **PATENT** REEL: 049726 FRAME: 0027 505566727

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> PATENT REEL: 049726 FRAME: 0028

Atty Docket No.: 210-75-CIP

Duke Ref.: DU4871US-CIP

<u>ASSIGNMENT</u>

THIS ASSIGNMENT, effective on the 17th day of June, 2019, by Krishnendu

Chakrabarty, 2812 Erwin Road, Suite 306, Durham, North Carolina, 27705, United

States; and Ran Wang, 2812 Erwin Road, Suite 306, Durham, North Carolina, 27705,

United States (hereinafter referred to as Assignor[s]);

WHEREAS, Assignors have invented certain new and useful improvements in

MULTI-LAYER INTEGRATED CIRCUITS HAVING ISOLATION CELLS FOR

LAYER TESTING AND RELATED METHODS, for which a Patent Application was

made on June 17, 2019 in the United States as application no. 16/442,920, which is a U.S.

continuation-in-part (CIP) patent application which claims priority to U.S. Non-

Provisional Patent Application Number 15/497,389, filed April 26, 2017, which claims

priority to U.S. Provisional Patent Application Number 62/340,714, filed May 24, 2016;

and,

WHEREAS, Duke University, a College organized under and pursuant to the

laws of North Carolina having its principal place of business at 2812 Erwin Rd., Ste 306,

Durham, North Carolina 27705 (hereinafter referred to as Assignee), is desirous of

acquiring the entire right, title and interest in and to said invention and said Application

for Letters Patent of the United States and all foreign countries, and in and to any Letters

Patent of the United States and all foreign countries to be obtained therefore and thereon.

NOW, THEREFORE, for good and sufficient consideration, the receipt of

which is hereby acknowledged, Assignor shave assigned, transferred and set over, and by

these presents do assign, transfer and set over, unto Assignee, its successors, legal

representatives and assigns, the entire right, title and interest in and to the above-

mentioned invention and applications for Letters Patent, and in and to any and all

divisionals, continuations and continuations-in-part of said applications, and any and all

Letters Patent in the United States and all foreign countries which may be granted

therefore and thereon, and reissues, reexaminations and extensions of said Letters Patent,

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and all rights under the International Convention for the Protection of Industrial Property,

the same to be held and enjoyed by Assignee, for its own use and benefit and the use and

benefit of its successors, legal representatives and assigns, to the full end of the term or

terms for which Letters Patent may be granted and/or extended, as fully and entirely as

the same would have been held and enjoyed by Assignors, had this assignment not been

made. The assignment of the right to claim entitlement and/or priority is executed nunc

pro tunc and is considered effective as of the filing date of the earliest application to

which priority and/or entitlement is claimed.

This Assignment is based on our employment relationship with Duke University

to assign the foregoing invention, and any patent applications therefore, in exchange for

Assignee payment of patent prosecution costs and other valuable consideration, the

receipt and sufficiency of which is hereby expressly acknowledged by the inventors.

AND, for the same consideration, Assignors hereby represent and warrant to

Assignee, its successors, legal representatives and assigns, that, at the time of execution

and delivery of these presents, except for any rights, titles and/or interests that have arisen

to Assignee under law or that have already been transferred to Assignee, Assignors are

the sole and lawful owners of the entire right, title, and interest in and to the said

inventions and applications for Letters Patent above-mentioned, and that the same are

unencumbered and that Assignors have good and full right and lawful authority to assign

and convey the same in the manner herein set forth.

AND, for the same consideration, Assignors hereby covenant and agree, and

likewise binds his heirs, legal representatives and assigns, to and with Assignee, its

successors, legal representatives and assigns, that Assignors will sign all papers and

documents, take all lawful oaths and do all acts necessary or required to be done for the

procurement, maintenance, enforcement and defense of any Letters Patent and

applications for Letters Patent for said invention, whenever counsel of Assignee, or

counsel of its successors, legal representatives and assigns, shall advise: that any

proceeding in connection with said invention, or said Patent application for Letters

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Patent, or any proceeding in connection with any Letters Patent or applications for Letters

Patent for said invention in any country, including but not limited to derivative or post-

grant proceedings, is lawful and desirable; or that any division, continuation or

continuation-in-part of any application for Letters Patent, or any reissue, reexamination

or extension of any Letters Patent, to be obtained thereon, is lawful and desirable.

AND Assignors hereby request the U.S. Commissioner of Patent and Trademarks

and the Patent and Trademark Offices of all foreign countries respectively, to issue said

Letters Patent of the United States and all foreign countries to Assignee, as Assignee of

said invention and the Letters Patent to be issued thereon, for the sole use and benefit of

Assignee, its successors, legal representatives and assigns.

AND Assignors acknowledge an obligation of assignment of this invention to

Assignee at the time the invention was made.

<< Signature Page Follows >>

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PATENT REEL: 049726 FRAME: 0031 Atty Docket No.: 210-75-CIP Duke Ref.: DU4871US-CIP

ASSIGNEE

Executed this 3 day of $3\sqrt{3}$, $20\sqrt{9}$

Assignee Signature: Eric F. Wagner

Title: Director of Legal Affairs / OLV

Address: Duke University 2812 Erwin Rd, Ste. Mail Box 90083 Durham, NC 27708

Witnessed by:

Karin Hollanc 7/3/2019

Name Date

Atty Docket No.: 21 Duke Ref.: DU4871	
ASSIGNORS	
Executed this $\mathcal{I}^{\mathfrak{s}^{\mathfrak{k}}}$	day of July , 20 1
Inventor Signature:	Krishnendu Chakrabarty

Witnessed by:	110 . A. 1 -	
Helmut Grach	lelu ut L	July 1, 2019
Name	J	Date
i Zhang	12 That di Zhang	July 1. 2019
Name		Date /
V	<i>'</i>	

Atty Docket No.: 210-75-CIP
Duke Ref.: DU4871US-CIP

ASSIGNORS

Executed this 1st day of July , 2019

Inventor Signature:

Ran Wang

Witnessed by:

Ankit Jain

Pate

Li Zhu

Name

Date